Title: Method and Apparatus for Scheduling the Processing of Commands for Execution by Cryptographic Algorithm Cores in a Programmable Network Processor
In re Patent Application of: Jaroslaw J. Sydir et al.
Docket No.: Intel-012PUS
Sheet 1 of 7

FIG. 1

Title: Method and Apparatus for Scheduling the Processing of Commands for
Execution by Cryptographic Algorithm Cores in a Programmable Network
Processor
In re Patent Application of: Jaroslaw J. Sydir et al.
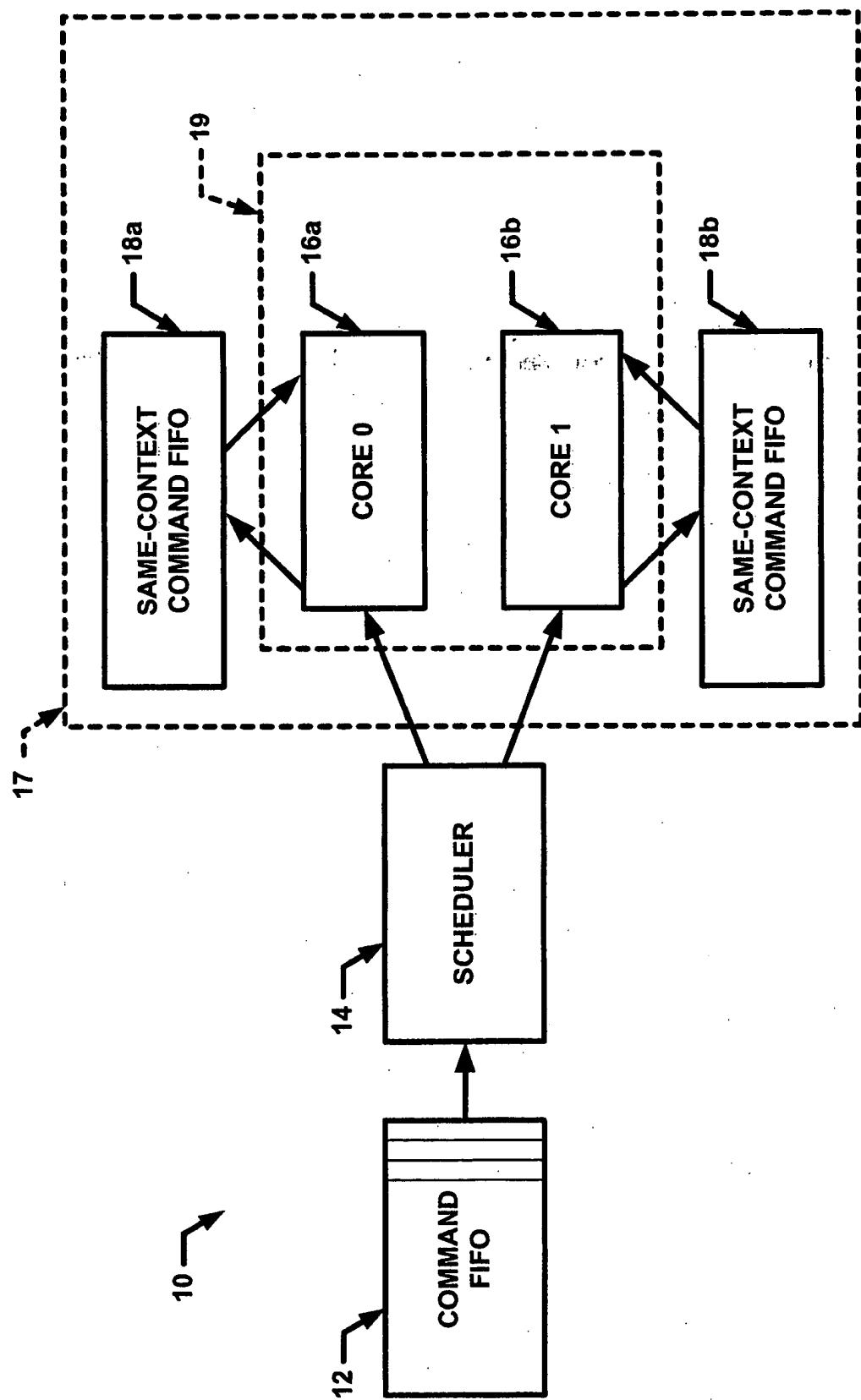Docket No.: Intel-012PUS
Sheet 2 of 7

FIG. 2

Title: Method and Apparatus for Scheduling the Processing of Commands for Execution by Cryptographic Algorithm Cores in a Programmable Network Processor
In re Patent Application of: Jaroslaw J. Sydir et al.
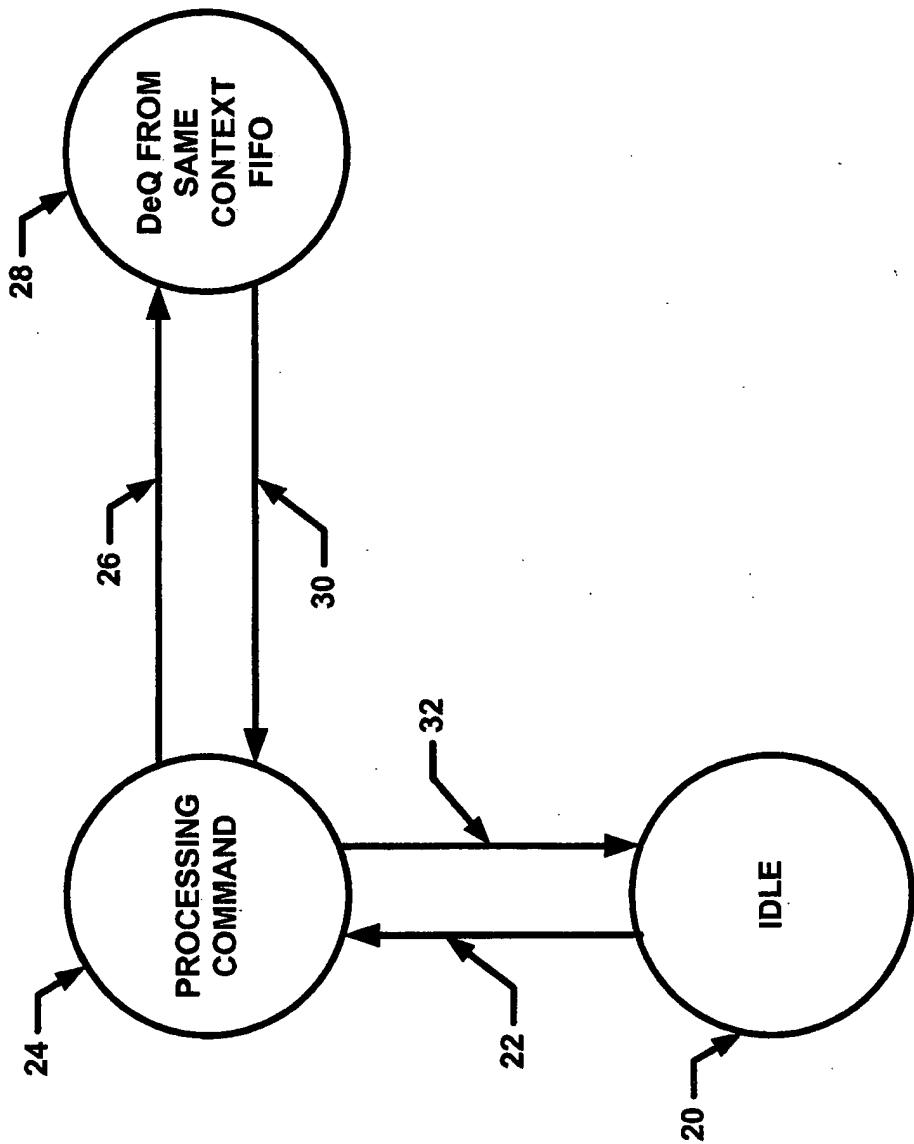Docket No.: Intel-012PUS
Sheet 3 of 7

START

WAIT FOR CORE TO GO IDLE OR COMMAND TO ARRIVE — 42

QUEUE COMMAND IN COMMAND FIFO — 58

DID CORE GO IDLE? — 44

ARE THERE COMMANDS IN THE MAIN FIFO? — 60

YES

NO

COMMAND IN COMMAND FIFO? — 46

ARE EITHER OF THE CORES IDLE? — 62

YES

NO

NO

NO

YES

MOVE COMMAND FROM COMMAND FIFO TO SAME CONTEXT COMMAND FIFO FOR SECOND CORE — 54

YES

IS SECOND CORE IDLE? — 48

MOVE COMMAND FROM COMMAND FIFO TO FIRST CORE FOR PROCESSING — 56

YES

NO

IS THE CONTEXT OF THE COMMAND IN THE COMMAND FIFO THE SAME AS THE CONTEXT OF THE COMMAND BEING PROCESSED BY THE SECOND CORE? — 50

NO

YES

IS SAME CONTEXT FIFO FOR SECOND CORE FULL? — 52

NO

YES

FIG. 3

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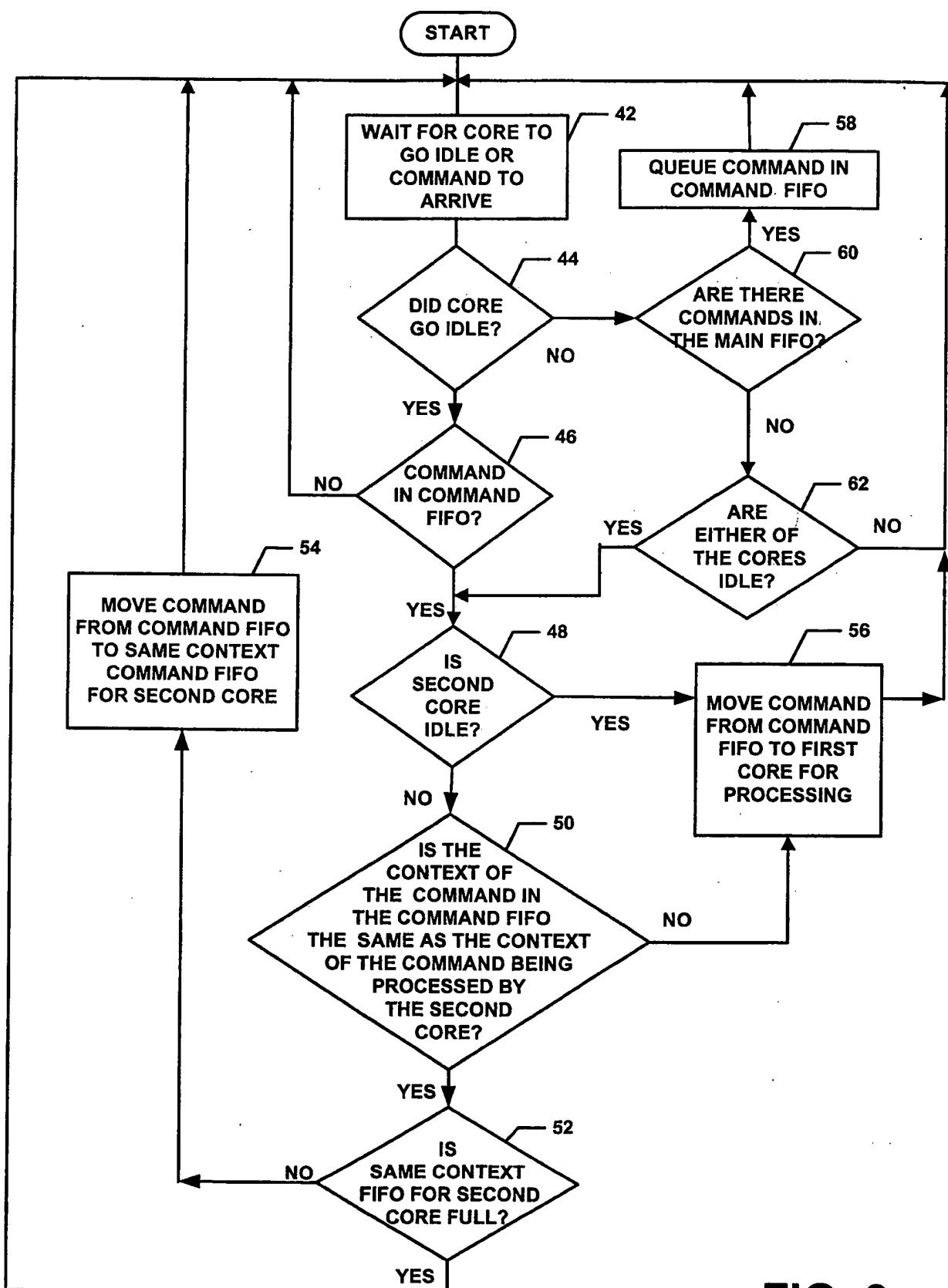Docket No.: Intel-012PUS
Sheet 4 of 7

70a

ROUTER — 74

LINE CARD — 76

NETWORK PROCESSOR — 78

70b

NETWORK

70c

NETWORK

70d

NETWORK

FIG. 4

Title: Method and Apparatus for Scheduling the Processing of Commands for
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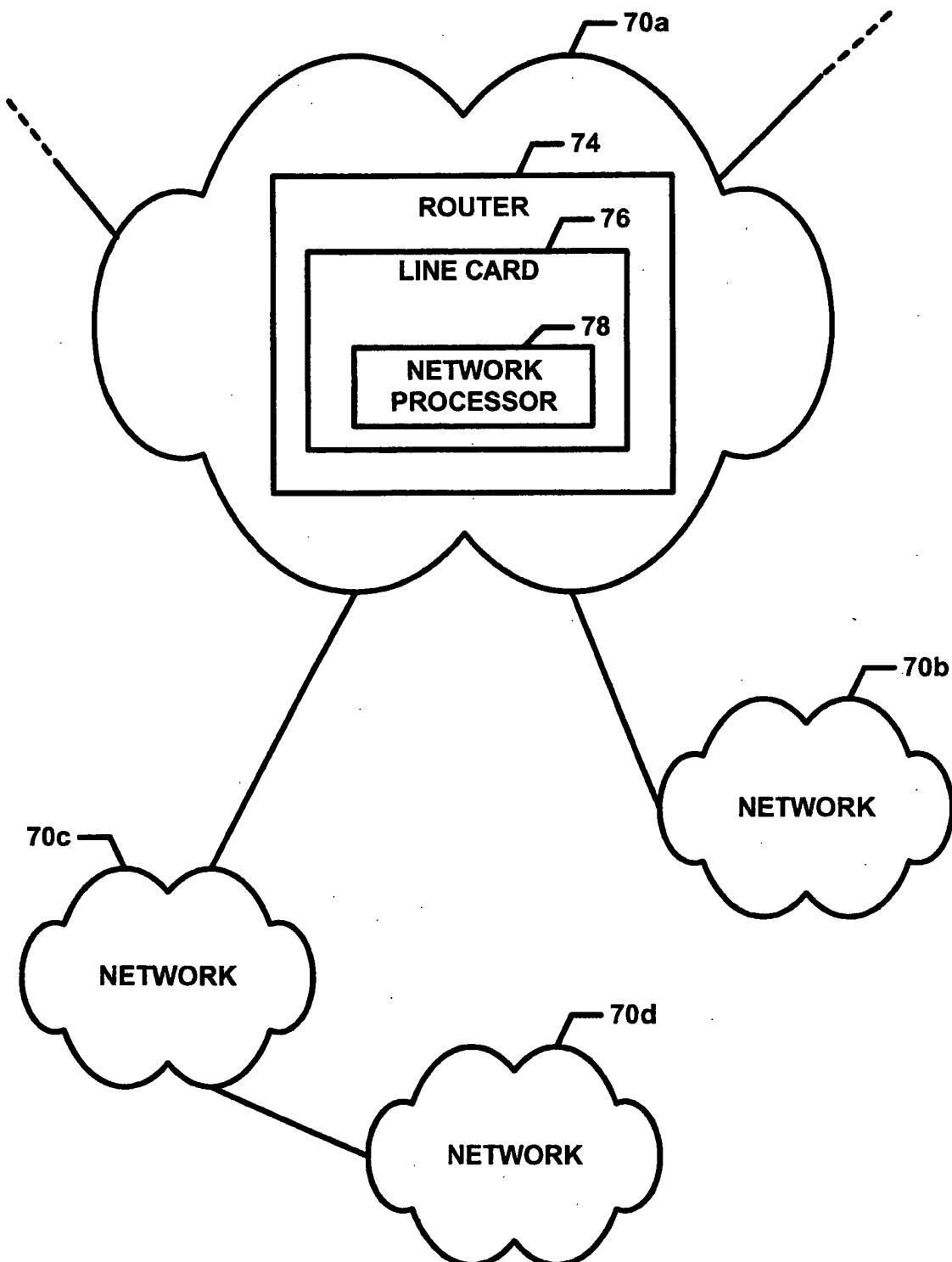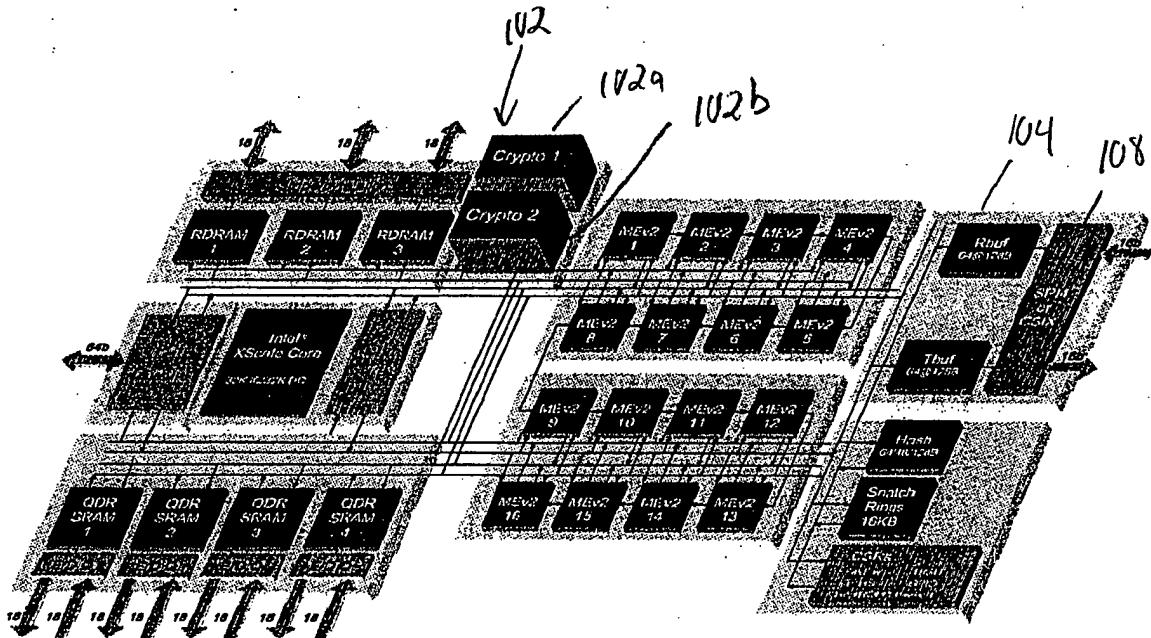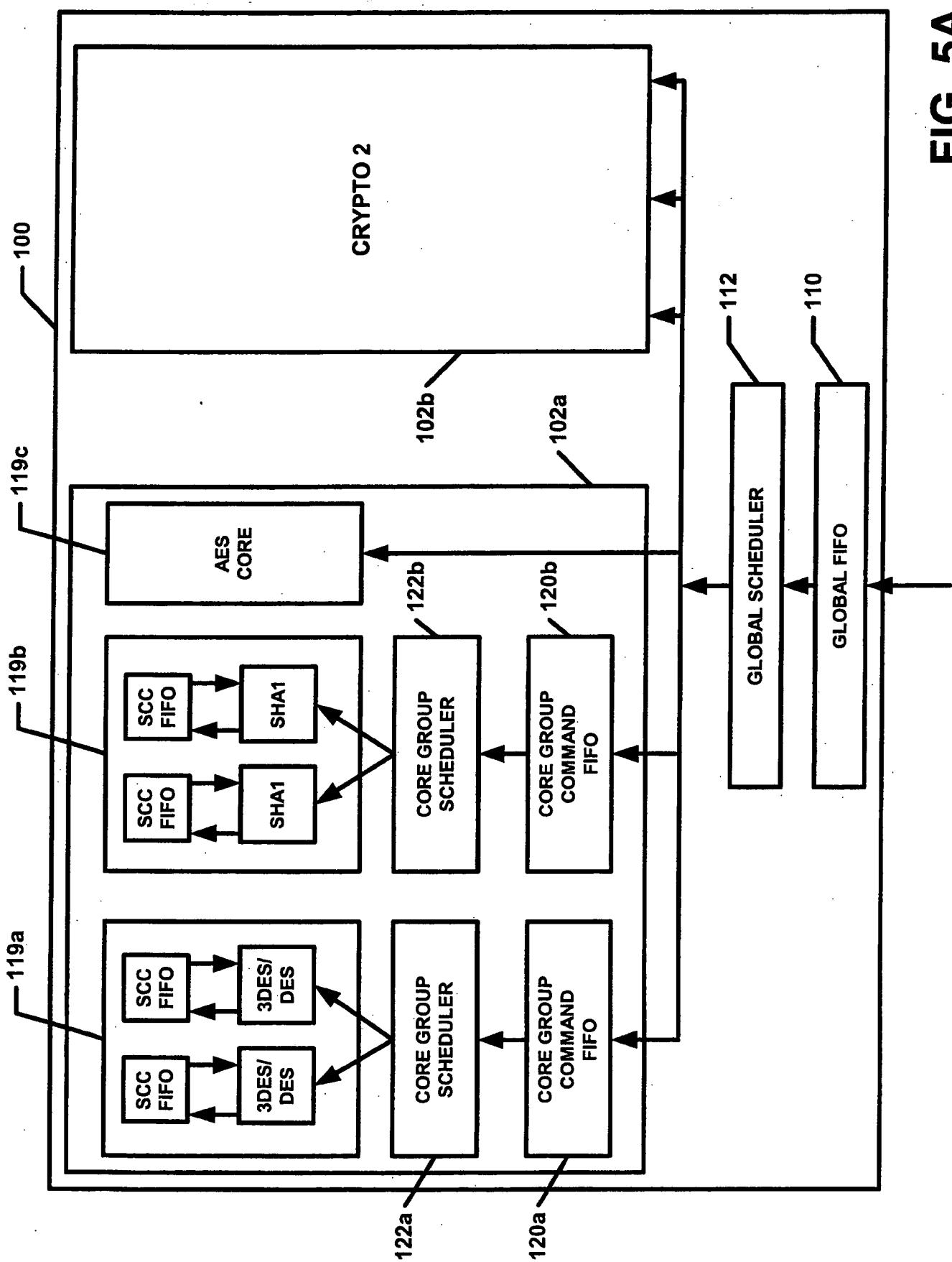Docket No.: Intel-012PUS
Sheet 5 of 7

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FIG. 5

Title: Method and Apparatus for Scheduling the Processing of Commands for
Execution by Cryptographic Algorithm Cores in a Programmable Network
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Docket No.: Intel-012PUS
Sheet 6 of 7

FIG. 5A

Title: Method and Apparatus for Scheduling the Processing of
Commands for Execution by Cryptographic Algorithm Cores in a
Programmable Network Processor
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Docket No.: Intel-012PUS
Sheet 7 of 7

FIG. 5B